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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|---------------------|------------------|
| 10/511,271 | 10/20/2004 | Tatsuya Inokuchi | 257211US6X PCT | 5018 |
| 22850 | 7590 | 06/19/2006 | EXAMINER | |
| OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 | | | JONES, CRYSTAL L | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2627 | |

DATE MAILED: 06/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/511,271 | INOKUCHI ET AL. | |
| | Examiner | Art Unit | |
| | Crystal Jones | 2627 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☒ Claim(s) 3,9 and 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 October 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group II in the reply filed on May 15, 2006 is acknowledged. The traversal is on the ground(s) that "a search and examination of the entire application would not place a *serious* burden on the Examiner," as stated in MPEP § 803. This is not found persuasive because the election was considered proper under PCT Rule 13.1 (Lack of Unity), MPEP § 1850, and because the reproducing apparatus/method of Group III further includes a decryption means/step not corresponding to a means/step found in the independent claims of Group II.

Claims 1-6 of Group I would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims. The unity of invention requirement between the inventions of Groups II and III, as set forth in the Office action mailed on April 13, 2006, has been reconsidered in view of the allowability of claims to the elected invention pursuant to MPEP § 1850. **The unity of invention requirement is hereby withdrawn as to any claim that requires all the limitations of an allowable claim.**

In view of the above noted withdrawal of the unity of invention requirement, applicant is advised that if any claim(s) presented in a continuation or divisional application include all the limitations of a claim that is allowable in the present application, such claims may be subject to provisional statutory and/or nonstatutory double patenting rejections over the claims of the instant application. Once a unity of

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invention requirement is withdrawn, the provisions of 35 U.S.C. 121 are no longer applicable. See *In re Ziegler*, 443 F.2d 1211, 1215, 170 USPQ 129, 131-32 (CCPA 1971).

Specification

2. The disclosure is objected to because of the following informalities: On page 22, line 8, "P2" should be changed to --PA2--. Appropriate correction is required.

Claim Objections

3. Claims 3, 9 and 13 are objected to because of the following informalities: Regarding claims 3 and 9, "lest" should be changed to --last--. Regarding claim 13, the phrase, "and performing a modulating process for modulating the output data of the second encoding process portion," of lines 24-26 of page 40 is redundant and should be omitted. Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 1-25 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention

Claims 1, 7, 13, 20, and 23 refer to data that is "mixedly recorded". It is unclear whether data in the first area and second are mixedly recorded (as disclosed on page 8, lines 2-17 of the specification) or data within the second area are mixedly recorded.

5. Claims 2-5, 8-11, 21, 22, 24 and 25 are rejected under 35 U.S.C. 112, second

paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims refer to “data decodable with the first error correction code” and/or “data decodable with the second error correction code”. It is unclear which data this refers to as the data in the second area is assumed to be decodable by first AND second error correction codes. It is recommended that these claims be amended to refer to the data by which error correction codes they are decodable by AND by which area they are located in as disclosed in the specification, particularly Figs. 12A-12D and page 18 line 1 through page 21 line 9. It is also recommended that these claims be amended in accordance with any base claim that may also be amended.

Allowable Subject Matter

6. Claims 1-25 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

Regarding claims 1, 7, 20 and 23, no reference alone or in combination discloses a first area encoded with a first error correction code, and a second area encoded with the first error correction code and decodable with a second error correction code, wherein the second area causes a cumulated DC component to deviate.

Regarding claim 13, no reference alone or in combination discloses mixedly recording data encoded with a first error correction code and data and decodable with a second error correction code, wherein a second encoding process causes a cumulated DC component to deviate.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to

applicant's disclosure. Mori et al. (U.S. Patent 7,055,082).

Mori et al. disclose an ECC block wherein data is alternately configured according to a Long-distance code (LDC) and a Burst indicator subcode (BIS), however, these codes do not cause a cumulated DC component to deviate and Mori et al. fail to disclose whether either code can be decoded by the other.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Crystal Jones whose telephone number is 571-272-2849. The examiner can normally be reached on Monday through Friday, 8:30 a.m. to 6 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CJ



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER